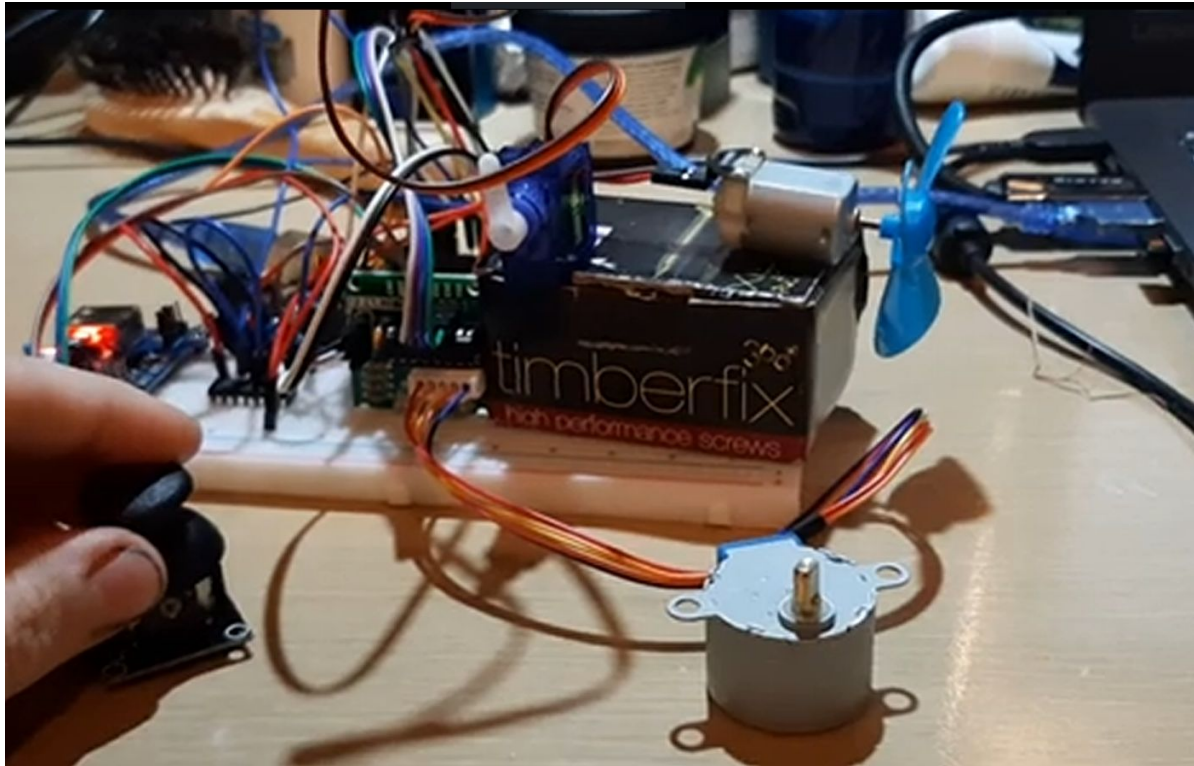# Joystick Control

20.12.2020
Rachel Ireland-Jones

Overview

This code should be able to

- Control the DC motor speed and direction
- Control the Stepper Motor Speed and direction
- Control the Servo Motor Position
- The press button of the joystick should be used to switch your stepper motor between Full step, Half step and Micro stepping modes.

Additionally, the serial monitor should show all the relevant data to this such as:

- Servo Angle
- Joystick Position in X & Y
- DC Motor PWM and Direction values
- Stepper Motor Stepping method and direction

This is still all without libraries.

[Joystick of Power](#)

GND
PWR
VRX
VRY
SW
Joystick

Stepper
Motor
Controller
OUT   IN
GNDPWR

A
Stepper
Motor
B
C   D

IOREF
RESET
3.3v
5v
GND
GND
Vin

AREF
GND
13
12
11
10
9
8

A0
A1
A2
A3
A4
A5

7
~6
~5
4
~3
2
1
0

En1   Vcc1
In1
Out1
GND
GND
Out2
In2
Vcc2

Control
Pwr
GND
Servo
Motor

5V DC
Power Supply

DC
MOTOR